

PERFORMANCE CONTRACT OF RESEARCH WING 2017-18		
Indicator #	Key Performance Indicator	Targets
1	No. of varieties to be approved	8 varieties (3 wheat, 1 barley, 1 cucumber, 1 bittergourd, 1 berseem, 1 linseed)
2	Spot examination	29 lines (5 cotton, 2 mung, 1 lentil, 1 chickpea, 1 mash, 1 basmati rice, 1 basmati hybrid, 1 tulsi, 1 stevia, 1 potato, 6 citrus, 5 date palm, 2 pomegranate)
3	DUS Trial	27 lines (6 citrus, 5 date palm, 2 pomegranate, 2 wheat, 4 potato, 1 rice, 1 Cherry Type Tomato, 1 Brinjal, 1 Sponge Gourd, 1 Peas, 1 Carrot, 2 sorghum)
4	Characterization of advance lines for registration	4 lines (2 mango, 2 jaman)
5	Testing of advance lines in national trials	54 lines (23 wheat, 5 cotton, 2 sugarcane, 2 maize, 2 mash, 2 sorghum, 2 maize fodder, 4 rapeseed & mustard, 4 potato, 2 lentil, 1 mung, 1 chickpea kabuli, 1 chickpea desi, 1 groundnut, 1 sunflower, 1 Rice)
6	Registration of 2 Varieties	2 olive varieties
7	Development of Heat Resilient Maize Hybrids	Testing of 60 inbred lines, constitution of 100 heat tolerant maize hybrids & comparison with multinational hybrids at 10 farmers field
8	Development of basmati rice hybrid & BLB resistant material genotypes	Screening of 15 elite basmati lines against BLB, salinity and submergence stresses, Seed multiplication of CMS lines and test hybrids
9	Commissioned cotton research project	Germplasm Collection = 20 accessions Screening = 25 accessions, Fresh Crosses = 30, 30F1, 1000F2 PSS, 50 F3 Progenies
10	Development of hybrids and varieties in vegetables resilient to climate change	<ul style="list-style-type: none"> • Transfer and plantation of breeding material • Purchase of machinery & vehicles • Building Construction
11	Evaluation of soybean & sesame genotypes for variety development	50 soybean & 25 sesame genotypes
12	Pre-basic seed Certification	160816 kg seed to be produced (6800 kg wheat, 600 barley, 1980 guar, 140 soybean, 100 linseed, 600 canola, 500 sesame, 50 potato minituber, 100 lentil, 3700 chickpea, 2510 mash, 7000 cotton, 12000 maize, 1500 Rice, 75000 garlic, 2000 carrot, 1350 spinach, 1250 pea, 400 okra, 100 onion, 425 radish, 336 turnip, 35 bitter gourd, 200 corriander, 80 tinda gourd, 8000 Maize fodder, 4800 sorghum, 1100 Berseem, 10500 Oats & 560 Alfalfa)
13	Sugarcane breeding work for variety development	Raising of 20000 seedlings Production of 500 g fuzz from bi-parental crosses and open pollination
14	Auction of hybrids to pre-qualified seed companies	3 hybrids (2 maize & 1 tomato)

15	Biotechnological Testing	119 entries of NCVT for Bt testing, PCR and ELISA On demand testing of GMOs Testing of 60 Wheat genotypes for rust resistance in Micro yield trials
16	Provision of microbial inoculants packets	7000 packets
17	Analysis of Burnt/Unburnt post harvest soil samples	100 samples
18	Production of true to type registered nursery plants	99000 nursery plants of various fruits
19	Research in saline soils	Experiment on planting geometry of guava plants in saline condition Screening of 20 rice & 30 wheat varieties Rehabilitation of 5 acres barren/saline land Experiments on feasibility of growing Quinoa
20	Analysis of pesticide regulatory/residues & heavy metal samples (Cd, Pb, Ni, Cr & As)	10000 pesticides regulatory samples 3000 pesticides residues samples 3500 heavy metal samples
21	Analyses of biofertilizer / biostimulant samples	100 samples
22	Fertilizer sample analysis under anti-adultreatment campaign of Punjab Fertilizer (Control) Order 1973	7000 samples
23	Registration of fertilizer companies as importer/manufacturer/distributor	As many received
24	Fertilizer experiments in field for formulation of fertilizer recommendations of different crops	500 experiments
25	Re-verification of 10 years old insecticides against cotton pests	10 pesticides
26	Monitoring of insecticides resistance against whitefly	5 Insecticides
27	Standarization of new pesticides against insect pests of field crops	6 new pesticides
28	Screening of candidate lines agaisnt various plant diseases	200 candidate lines (wheat, cotton, maize, sugarcane, mung, mash, chickpea, sesame, potato, tomato, brinjal, peas & berseem)
29	Disease sample analysis and identification	1500 samples (500 + 500 disease & 500 virus infected)
30	Research on organic farming	3 experiments on mung, mash & turmeric

31	Farmers field days/trainings	13 farmer days on soil & water conservation, 4 trainings on drought & flood management and Advisory services for rehabilitation of newly leveled land to 60 farmers by SAWCRI 13 trainings on food preservations PHRC 18 on plant protection by PPRI 40 on citrus orchard management by Citrus Advisory service on site to 40 farmers by SSRI 32 farmer days (2 by each of 16 instiutes) 6 trainings of olive to Agriculture extension staff by BARI 2 trainings on silage & hay making by Fodder
32	Analysis of samples for quality parametrs by PHRC	700 crop samples, 500 vegetable, 500 fruit, 180 milk
33	Research on food products & processing	12000 pet bottles, 3200 jams jar, 5000 ketchup packets
34	Capacity building of scientists (No. of scientists for training)	78 for Foreign trainings/seminar/conference All DDOs for PPRA/Procurement rules 52 for Management trainings 30 for Monitoring & Evaluation 2 for Chinese language 52 for ICT/IT skills 52 for Project Management/Project Preparation/PC-I 52 for Communication skills
35	Analysis of soil samples & issuance of soil health cards	600,000 soil samples & 500,000 soil health cards
36	ISO accreditation-17025 & International Accrediatation of AARI Labs	21 labs (9 in 2016-17 & 12 in 2017-18) International Accreditation of 9 labs
37	Import & plantation of plants in farmer fields	250000 olive plants, 5000 date plam plants & 3 date palm multiplication Blocks
38	Research on garlic & ginger	•Mechanical sowing, Interculture & harvesting of 5 acres of garlic •50 adaptability trials of Ginger in Sialkot, Narowal & Gujranwala
39	Evaluation of 9 fruit plants for adaptibility study	Adaptability Testing & characterization of Avocado, Chiku, Nectarine/peaches, Pistachio, Berries, Passion fruit, Mangosteen, Fig etc.
40	Production of conserved fodders (Silage and Hay)	Production of silage (sorghum and corn) and hay (alfalfa and berseem) from selected lines
41	Infrastructure improvement	In CFY 9 blocks, Roads, Tuff tile, Vehicles Parking and 81 washrooms will be completed
42	Crop diversification through different crop rotations	•Experiments on 5 diversified crop rotations in each Rice-Wheat & cotton-wheat systems •Adaptability trial on wheat, barlay, Pearl Millet, Mustard, Castor Bean,

43	DNA fingerprinting & training on Bt.testing	<ul style="list-style-type: none"> •Development of varietal identification key for maize, tomato and datepalm varieties •Training of 200 persons on detection, identification & quantification of Bt
44	Screening of genotypes against different post-emergent herbicides	150 chickpea & 55 lentil genotypes
45	Research on chickpea & mung in Thal region	<ul style="list-style-type: none"> • Screening of 200 chickpea and 100 mungbean local & exotic lines for heat, drought and disease tolerance & hybridization • Generation Advacement in Kaghan
46	Genetic Improvement of Gram for wilt and blight resistance	Screening of 100 lines of gram for blight & wilt resistance and identification
47	Development of tomato hybrids and varieties suitable for tunnels and open fields	<ul style="list-style-type: none"> • Germplsm maintenance • Constitution of 25 new tomato hybrids & Preliminary evaluation of 40 F1 hybrids
48	Nutrients management to control citrus decline	Experiment on nutrients management in selected orchards and nutrient management practices to control citrus decline
49	Nutrition enhancement of crops fruits, vegetables and their products in climate change scenario	<ul style="list-style-type: none"> • Experiments on biofortification of Zn & Fe in wheat, rice, mung thorough genetic & agronomic means and pasta products • Evaluation of 50 maize inbred lines and approved varieties/hybrids for protein, oil content and pro vitamin A • Biofortication in Mango, ber & date palm • Screening of 50 lines of Canola germplasm for high Omega-3 fatty acid and 50 sunflower genotypes for high Omega-9 fatty acid • Selection of guava farms, standardization and optimization of pulps/juices and R&D work • Experiment on testing of avilable Kinnow variants, rootstocks, orchard management paractices and fruit storability • Standardization of analytical methods & testing of samples for Pro Vit-A, Vit-C, Lycopene, TSS, Protein, Acidity & oil contents
50	Development of cotton variety suitable for mechanical picking	Collection & evaluation of potential parents of cotton and hybridization
51	Enhancement of oil content in cotton varieties through selection and breeding strategies	Collection & evaluation of potential parents of cotton and hybridization

52	Sustainable management of Dusky Cotton Bug to improve lint quality and seed germination in Cotton	Screening of cotton cultivars & testing efficacy of plant extracts against dusky bug
53	Management of whitefly by integrated strategies and development of resistant cotton germplasm through genetic engineering	<ul style="list-style-type: none"> • Collection, identification & confirmation of identified species of whitefly with molecular data • Experiment on efficacy of different insecticides against whitefly
54	Development of Sustainable Management Strategies of Pink Bollworm	<ul style="list-style-type: none"> • Survey, collection, identification and rearing of Pink bollworm • Experiments on Efficacy of different insecticides in field and lab condition against PBW
55	Acceleration of Maize Breeding Through Inducer Line Mediated Double Haploid Inbred Lines for Development of Climate Smart, High Yielding Maize	<ul style="list-style-type: none"> • Evaluation of Inducer line mediated double haploid drought tolerant 70 inbred line • Primer synthesis and DNA extraction
56	Enhancement of quality and yield of guava through improved pre-harvest measures	<ul style="list-style-type: none"> • Establishment of one block of guava under high density & Experiments on nutrient & canopy management • Selection of 2-3 guava varieties with elite characteristics
57	Development of short duration, high yielding and disease resistant mungbean cultivars for Rice-Wheat Cropping System	<ul style="list-style-type: none"> • Identification of early maturing and disease resistant mungbean genotypes • Screening against cercospora leaf spot
58	Development of sorghum-Sudangrass hybrids for better forage yield and quality under normal and drought stress	<ul style="list-style-type: none"> • Evaluation of 10 sorghum and 10 sudan grass hybrids for drought tolerance • Physiological data recording of selected hybrids
59	Feasibility of growing organic cotton in Pothwar area	Experiment on cultivation of organic cotton in Pothwar region
60	Import of olive oil extraction machinery	Installation of olive extraction machine and training of technical staff
61	Impact of managed pollination by Apis mellifera L. on the yield of different crops	Evaluation of Apis mellifera contribution in pollination of Sunflower, cucurbits & brassica
62	R&D Boards/ Stakeholder consultation	<ul style="list-style-type: none"> • Endorsement of Annual Plan of Research Work by R&D board of respective institute • 4 R&D meetings of each institute in a year
63	Auction of unservicable stock	Completion of Auction process
64	Weekly Crop Situational Report	Compilation and sending to different stakeholders
65	Research Publications	250 research Publications (10 by each Institute)
66	Field Visits	2 by Director General and each Director in a week
67	Monitoring & Evaluation	Strengthening of M&E Cell with consultation of ADU & 40 Visits of research institutes for monitoring & evaluation
68	App Development	2 Apps for Research Data recording & farm management by ADU/PITB

69	Human Resource management	<ul style="list-style-type: none"> •Posting of 3 new Additional DGs •4 DPC meetings in FY 2017-18, 1 in each quarter •Recruitment of Staff, Framing & Approval of Service Rules
70	Rationalization of AARI Resoucrs	Human, Institutes & Land Resoucrs will be rationalized in this FY
71	Plantation/uprooting of fruit plants/trees	<ul style="list-style-type: none"> •Plantation of 26000 trees/fruit plants in farm/office/building/ residential colonies •Uprooting of old/unproductive fruit plants of Research Farms
72	Income Generation	Rs. 213328125 during FY 2017-18
73	International Linkages	4-5 partnerships established of strategic crops
74	Marketing Research	Market research on guava, citrus & Mango

KEY PERFORMANCE INDICATORS OF THE PERFORMANCE CONTRACT																								
QUARTERLY RESULTS TRACKER																								
SERVICE DELIVERY/ NON-DEVELOPMENT RESULTS																								
Years/ Quarterly Breakdown		2017/18												2018/19		2019/20								
Indicator #	Key Performance Indicator	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items					
1	No. of varieties approved (Wheat = 1, Barley = 1) [WRI, Faisalabad]	Planned	Recommendation by ESC & approval by PSC	1 + 1 = 2 varieties approved.	-	-	0	1	0	1	0	0.4												
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
2	No. of varieties approved (Wheat = 1) [AZRI, Bhakhar]	Planned	Recommendation by ESC & approval by PSC	1 variety approved.	-	-																		
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
3	No. of varieties approved (Wheat = 1) [BARI, Chakwal]	Planned	Recommendation by ESC & approval by PSC	1 variety approved.	-	-	2	0	0	0	0	0.4												
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
4	No. of varieties approved (Vegetable =2, 1 each of Cucumber & Bitter gourd) [Vegetable Research Institute, Faisalabad]	Planned	Recommendation by ESC & approval by PSC	2 varieties approved.	-	-	4	1	0	1	2	1.6												
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
5	No. of varieties approved (Berseem =1) [Fodder Research Institute, Sargodha]	Planned	-	Submission to ESC for recommendation to PSC.	Submission to PSC for approval	1 variety approved	1	0	0	0	0	0.2												
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
6	No. of varieties approved (Linseed =1) [Oilseeds Research Institute, Faisalabad]	Planned	Recommendation by ESC	-	Approval by PSC	1 variety approved	1	2	0	0	0	0.6												
	Source of verification: Minutes of meeting of ESC & PSC	Achieved																						
7	Spot examination of five advance lines of cotton [Cotton Research Institute, Multan]	Planned	-	Spot Examination	-	-	6	5	4	5	5	5												
	Source of verification: Spot Examination Report	Achieved																						
8	Spot examination of one advance line of Mungbean [AZRI, Bhakhar]	Planned	Spot Examination	-	-	-																		
	Source of verification: Spot Examination Report	Achieved																						
9	Spot examination of advanced lines of Mungbean, Chick pea and lentil [Pulses Research Institute, Faisalabad]	Planned	Spot Examination of one Mungbean line	-	Spot Examination of one Chickpea and one lentil line	-	0	1	0	0	1	0.4												
	Source of verification: Spot Examination Report	Achieved																						
10	Spot examination of one advance line of Mashbean [BARI Chakwal]	Planned	Spot Examination of one Mashbean line	-	-	-	0	0	0	0	0	0												
	Source of verification: Spot Examination Report	Achieved																						
11	Spot examination of one advance line of Basmati rice [Rice Research Institute, Kala Shah Kaku]	Planned	-	Spot Examination of one Basmati rice line	-	-	0	3	0	3	0	1.2												
	Source of verification: Spot Examination report	Achieved																						
12	Testing of one basmati rice hybrid in national trial [Rice Research Institute, Kala Shah Kaku]	Planned	-	Hybrid in national trial	-	-	0	0	0	0	0	0	This is first year of Rice hybrid testing in NURYT.											
	Source of verification: National Trials data of respective crop	Achieved																						
13	Spot Examination of one advance line of Tulsi and one of Stevia [Agronomic Research Institute, Faisalabad]	Planned	Spot examination of Tulsi	-	Spot examination of Stevia	-	-	-	-	-	-	0												
	Source of verification: Spot Examination Report	Achieved																						
14	Spot Examination of one advance line of Potato [Potato Research Institute, Sahiwal]	Planned	-	Sowing of one line for spot examination	Spot examination	-	0	3	0	0	0	0.6												
	Source of verification: Spot Examination Report	Achieved																						
15	Spot Examination of one advance line of Rough Lemon and 5 advanced lines (Taroco, Blood Red, Musambi, Less seeded kinnow, Shamber) [Citrus Research Institute, Sargodha]	Planned	Spot Examination of Rough lemon	Spot Examination of 5 advanced lines (Taroco, Blood Red, Musambi, Less seeded kinnow, Shamber)	-	-																		
	Source of verification: Spot Examination report	Achieved																						
16	Spot Examination of 5 advanced lines of date palm and 2 of Pomegranate [Horticultural Research Institute, Faisalabad]	Planned	Spot Examination (5 date palm & 2 pomegranate)	-	-	-	0	0	3	0	0	0.6												
	Source of verification: Spot Examination Report	Achieved																						
17	DUS Trial of 5 advanced lines of date palm and 2 of Pomegranate [Horticultural Research Institute, Faisalabad]	Planned	Documentation, DUS (5-date palm & 2 pomegranate)	-	-	-																		
	Source of verification: DUS trial Report	Achieved																						
18	DUS trial of one advance line of Rough Lemon and 5 advanced lines (Taroco, Blood Red, Musambi, Less seeded kinnow, Shamber) [Citrus Research Institute, Sargodha]	Planned	DUS Testing of Rough lemon	DUS Testing of 5 advanced lines (Taroco, Blood Red, Musambi, Less seeded kinnow, Shamber)	-	-																		

(small trials etc.)

3 4	Testing of four lines (2 sorghum, 2 maize) in national trial (Fodder Research Institute, Sargodha)	Planned	Seed supplied to NARC for National Trials.	Data recording and harvesting.	-	-	5 (Sorghum m=3,	4 (Sorghum m=2,	3 (Sorghum m=2,	2 (Sorghum m=2)	1 (Sorghum m=1)	3										
	Source of verification: Field trials, data record books.	Achieved																				
3 5	Testing of four lines of potato in national trial (Potato Research Institute, Sahiwal)	Planned	-	Seed supplied to NARC and sowing of National Trials.	Data recording and harvesting.	-	13	7	14	13	14	12.2										
	Source of verification: Field trials, data record books.	Achieved																				
3 6	Testing of two lines of Wheat in national trial (Regional Agricultural Research Institute, Bahawalpur)	Planned	-	Seed supplied to NARC for National Trials.	Data recording and harvesting.	-	4	3	3	2	2	2.8										
	Source of verification: Field trials, data record books, Results of National Trials.	Achieved																				
3 7	Registration of 2 olive Varieties (BARI, Chakwal)	Planned	Case submitted to FSC&RD	Follow-up	2 Varieties Registered	-	-	-	-	-	-	-										
	Source of verification: Submitted case, Registration document from FSC&RD	Achieved																				
Years/ Quarterly Breakdown																						
Indicator #		Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19			Comments	Decision Items		
1	5600 kg Pre-basic seed Certification (5000 kg wheat of 4 varieties & 600 kg Barley of 1 variety) (Wheat Research Institute, Faisalabad)	Planned	-	Sowing & Writing to FSC&RD	Crop inspection by FSC&RD	Seed sampling, harvesting & certification of 5600 kg pre-basic seed	7000	0	4515	3120	8500	4627				Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			
	Source of verification: FSC&RD certification and tags	Achieved																				
2	1800 kg Pre-basic seed certification of 3 wheat varieties (RARI, Bahawalpur)	Planned	-	Sowing & writing to FSC&RD	Crop inspection by FSC&RD	Seed sampling, harvesting & certification of 1800 kg pre-basic seed	1900	1100	1100	900	850	1170										
	Source of verification: FSC&RD certification and tags	Achieved																				
3	480 kg pre-basic seed certification of 1 Guar variety (Fodder Research Institute, Sargodha)	Planned	Sowing & Writing to FSC&RD	Crop inspection by FSC&RD	Seed sampling, harvesting & certification of 480 kg pre-basic seed	Issuance of tags by FSC&RD & packing of seed	0	0	0	0	0	0										
	Source of verification: FSC&RD certification and tags	Achieved																				
4	1340 kg pre-basic seed certification (140 kg soybean of 1 variety and 100 kg Linseed of 1 variety, 600 kg canola of 2 varieties, 500 kg sesame of 2 varieties) (Oilseeds Research Institute, Faisalabad)	Planned	Sowing of Soybean & Writing to FSC&RD	Crop inspection of Soybean by FSC&RD & Harvesting. Sowing Linseed & Writing to FSC&RD	Seed sampling of Soybean by FSC&RD	Issuance of tags by FSC&RD & packing of Soybean seed. Seed sampling by FSC&RD & Harvesting of linseed.	90-80-17 0 kg	-	-	-	-	170	Pre-basic seed production of soybean & linseed was started from 2016-17.									
	Source of verification: FSC&RD certification and tags	Achieved																				
5	50 kg minitubers (BNS) of 3 potato varieties (Potato Research Institute, Sahiwal)	Planned	-	Planting, selection of healthy plants, culturing of ex-plant	Incubation of plants and Micro-propagation	Shifting of micro propagated plants, hardening & collection of mini-tubers																
	Source of verification: Stock & lab registers	Achieved																				
6	800 kg Pre-basic seed certification (100 kg of 1 Lentil and 700 kg desi (2 varieties) & kabuli chickpea (2 varieties)) (Pulses Research Institute, Faisalabad)	Planned	Sowing & writing to FSC&RD	-	Crop inspection by FSC&RD	Harvesting & Seed inspection by FSC&RD and certification of 800 kg seed.	Lentil-400; Chickpea-1200	Lentil-2300; Chickpea-1000; Mung-1000; Moth-400	Lentil-1250; Chickpea-1150; Mung-1200; Moth-400	Mung-20	Lentil-1250; Chickpea-1150	3014										
	Source of verification: FSC&RD certification and tags	Achieved																				
7	Supply of 2510 kg basic seed of 1 mash variety to PSC (Pulses Research Institute, Faisalabad)	Planned	Seed Supplied to PSC	-	-	-	1410	1950	400	-	-	752	This is a collaborative project with Punjab Agri. Extension Deptt. This institute do not have any budget allocation under this project since July-2016.									
	Source of verification: Official letter & stock register	Achieved																				
8	7000 kg pre-basic seed certification of 7 cotton varieties (Cotton Research Institute, Multan)	Planned	Roughing of crop	Crop inspection by FSC&RD	Seed inspection by FSC&RD	Issuance of tags by FSC&RD & certification of 7000 kg seed.	5000	4500	6500	6000	5000	5400										
	Source of verification: FSC&RD certification tags	Achieved																				
9	12000 kg seed certification (4000 kg Pre-basic & 8000 kg Basic seed of Maize OPVs of 2 varities, 3000 kg of 1 hybrid) (MMRI, Sahiwal)	Planned	Sowing & Writing to FSC&RD	Crop & seed inspection and issuance of tags by FSC&RD	Sowing & Writing to FSC&RD	Crop & seed inspection and issuance of tags by FSC&RD	12000	11500	10500	9200	11400	11000										
	Source of verification: FSC&RD certification tags	Achieved																				
1 0	3000 kg pre basic seed certification of 4 chickpea varieties (Arid Zone Research Institute, Bhakkar)	Planned	Sowing & writing to FSC&RD	-	Crop inspection by FSC&RD	Harvesting & Seed inspection by FSC&RD and certification of 3000 kg seed.																
	Source of verification: FSC&RD certification tags	Achieved																				
1 1	1500 kg pre basic seed certification of 6 basmati & 4 coarse rice varieties (1000 kg basmati & 500 kg coarse) (Rice Research Institute, Kala Shah Kaku)	Planned	Sowing & writing to FSC&RD	Crop inspection by FSC&RD & Harvesting	Certification of 1500 kg seed	-	703 basmati, 415 coarse	652 B 376 C	759 B 303 C	746 B 463 C	-	715 B 389 C										
	Source of verification: FSC&RD certification tags	Achieved																				

Production of Pre-basic seed

	1 2	81176 kg pre basic seed certification of vegetable crops (75000 kg garlic, 2000 carrot, 1350 spinach, 1250 pea, 400 okra, 100 onion, 425 radish, 336 turnip, 35 bitter gourd, 200 coriander & 80 tinda gourd) [Vegetable Research Institute, Faisalabad]	Planned	-	-	-	-	-	-	-	-	-	-	-	-	Seed certification of Garlic, carrot, spinach, pea, okra, radish, turnip, coriander	-	-	-	-	-	-	-	-	-	-	Seed certification of onion, bitter gourd & tinda gourd will be completed up to July-2018	-	-	-	-	-	-	-	-		
		Source of verification: FSC&RD certification tags	Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Completion of auction process of 2 maize & 1 tomato hybrids to the private seed companies	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Auction of 2 maize & 1 tomato hybrids to pre-qualified seed companies	Achieved	Invitation to already pre-qualified seed companies for bidding	MOU sign and handing over seed of parental lines to the qualified company	Completion of auction process	-	-	-	-	-	-	-	0																							
Source of verification: Auction documents (Advertisement, Invitation letter, notification of pre-qualified companies, MOU signed)			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Testing of biopest (GMO) crops	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Testing of 119 entries of National Coordinated variety Trial (NCVT) for Bt. testing through strip test, PCR and ELISA (Agricultural Biotechnology Research Institute, Faisalabad)	Achieved	Sowing of trial, Strip Test of 595 samples, ELISA of 238 samples	DNA extraction, PCR and Gel Electrophoresis of 119 samples	Completion of data and Report writing	Receipt of seed for trial and layout/sowing of trial	70	80	44	49	75	64																								
Source of verification: Data register, tested strips, Gel pictures, Reports			Achieved																																		
	2	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		On demand testing of different crops for GMO elements (Agricultural Biotechnology Research Institute, Faisalabad)	Achieved	Receipt of samples from stakeholders, DNA extraction, ELISA and strip test, Data compilation and report writing	-	-	-	225	237	1329	442	481	543																								
Source of verification: Data register, tested strips, Gel pictures, Reports			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Identification and tagging of rust resistance genes in wheat	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Testing of wheat genotypes included in Micro trial for rust resistance genes (Agricultural Biotechnology Research Institute, Faisalabad)	Achieved	Sowing of trial / collection of leaf samples (Tentative 60)	DNA extraction and PCR for 6 important genes	PCRs and Gel electrophoresis, compilation of results and report	60	39	42	39	40	44																									
Source of verification: Data register, Gel pictures, Reports			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Preparation and provision of microbial inoculants (7000 packets) to farmers	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Provision of 7000 microbial inoculants packets (Agricultural Biotechnology Research Institute, Faisalabad (Incremental))	Achieved	1500	2500	1500	1500	4265	3563	7008	7065	7642	5909																								
Source of verification: Inocula Register, Receipts / monthly reports / annual report			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Analysis of 1000 burnt vs. unburnt soil samples for total organic carbon	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Analysis of Burnt/Unburnt post harvest soil samples from rice and wheat fields (Agricultural Biotechnology Research Institute, Faisalabad)	Achieved	25	25	25	25	160	208	0	0	0	184	These samples are received from SFRI and analysed accordingly.																							
Source of verification: Reports / Registers / Files			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
Production of true to type registered nursery plant	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		11000 true to type registered nursery plants (Mango Research Institute, Multan)	Achieved	Raising of fresh rootstock & Grafting of last year's rootstock	Nursery protection against frost & post Grafting care	1. 11000 Plants prepared for sale 2. Grafting of available rootstock	Plant Sale continued & post grafting care	6454	4436	2224	-	-	4371																								
Source of verification: Nursery stock register			Achieved																																		
	2	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		23000 true to type registered nursery plants of various fruits (Horticultural Research Institute, Faisalabad)	Achieved	Tagging of plants for multiplication	-	Planting of cuttings of selected plants	23000 plants prepared	12034	14025	3060	-	-	9706.3																								
Source of verification: Nursery stock register			Achieved																																		
	3	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		49000 true to type registered nursery plants of olive, grapes, peaches, avocado, walnut, apple etc. (Barani Agricultural Research Institute, Chakwal)	Achieved	-	-	-	49000 plants prepared	37665	27987	19144	-	-	28265																								
Source of verification: Nursery stock register			Achieved																																		
	4	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		16000 true to type registered nursery plants of citrus (Citrus Research Institute, Sargodha)	Achieved	Raising of rootstock & Grafting	Care & maintenance	Grafting & care/ maintenance	16000 plants prepared	11232	7037	4306	-	-	7525																								
Source of verification: Nursery stock register			Achieved																																		
Years/ Quarterly Breakdown				2017/18																																	
-zeining of rice & wheat genotypes tested soil	1	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Experiment on planting geometry of guava in saline condition (Soil Salinity Research Institute, Pindi Bhattian)	Achieved	-	Transplanting	Data Recording	Data Recording	-	-	-	-	-	0	New Experiment																							
Source of verification: Data register of researcher, Crop Register of Farm Manager, photographs			Achieved																																		
	2	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items																
		Screening of 20 rice & 30 wheat genotypes/varieties in saline soils	Achieved	Transplanting of rice varieties and agronomic practices.	Harvesting of rice /sowing of wheat.	Agronomic Practices	Harvesting of wheat	45	40	55	42	38	44																								
Data register of researchers.			Achieved																																		

High density plantation of guava & Sc in salt affe	3	Rehabilitation of 5 acres of Barren salt affected soil	Planned	Preparation of land, gypsum application transplanting of rice	Harvesting of rice / sowing of wheat.	Agronomic Practices	Harvesting of wheat	-	-	-	-	-	-	-	0																									
		Source of verification: Data register of researchers and farm manager.	Achieved																																					
	4	Experiment on feasibility of growing Quinoa in salt affected soils	Planned	Site collection & land preparation	Sowing of Quinoa	Agronomic Practices	Harvesting of wheat	New Exp	-	-	-	-	-	-	0																									
		Source of verification: Data register, pictures of experiment	Achieved																																					
Years/ Quarterly Breakdown																																								
Establishment of 10000 sugarcane seedlings for vertical development program	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		
	1	Raising of 2000 sugarcane seedlings for variety development (Sugarcane Research Instt., Faisalabad)	Planned	Sowing of fuz	Transplanting in field	Data recording	Data recording	13222	20396	24050	64340	23536	29109				Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun																				
		Source of verification: Data register of researcher, Crop Register, Annual Report	Achieved																																					
Years/ Quarterly Breakdown																																								
Production of 500 & Sugarcane Fuz. at Murree	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		
	1	Production of 500 sugarcane fuz. from bi-parental crosses and open pollination at Murree (Sugarcane Research Instt., Faisalabad)	Planned	Maintenance of genotypes	Maintenance of genotypes	Planting of breeding material, hybridization & collection of fuz	Crossing of Sugarcane breeding material & collection of fuz	515	310	560	440	480	461				Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun																				
		Source of verification: Data register, Annual Report	Achieved																																					
Years/ Quarterly Breakdown																																								
Analysis of pesticide regulatory, pesticide residue and heavy metals (Cd, Pb, Ni, Cr) samples	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		
	1	Analysis of 10000 pesticide regulatory samples (Incremental) (Institute of Soil Chemistry & Environmental Sciences, Faisalabad)	Planned	3000	2500	2500	2000	9578	8627	7585	7483	8676	8390				Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun																				
		Source of verification: Data entry register, Weekly (Incremental)	Achieved																																					
	2	Analysis of 2500 pesticide residues samples (Incremental)	Planned	625	625	625	625	2100	800	600	700	250	890																											
		Source of verification: Weekly & quarterly reports, report of previous year	Achieved																																					
	3	Analysis of 500 fruit samples for pesticide residues (Incremental)	Planned	125	125	125	125																																	
		Source of verification: Weekly & quarterly reports (Incremental)	Achieved																																					
4	Analysis of 2500 vegetable samples for heavy metals each for Cd, Pb, Ni, Cr & As (Incremental)	Planned	625	625	625	625	939	910	578	388	742	711	Results interpreted in review meetings.																											
	Source of verification: Weekly & quarterly reports	Achieved																																						
5	Analysis of 500 soil samples for heavy metals each for Cd, Pb, Ni, Cr & As (Incremental)	Planned	125	125	125	125	250	390	398	290	320	330																												
	Source of verification: Weekly & quarterly reports	Achieved																																						
6	Analysis of 500 waste water samples each for Cd, Pb, Ni, Cr & As (Incremental)	Planned	125	125	125	125	372	194	20	0	35	124																												
	Source of verification: Weekly & quarterly reports	Achieved																																						
Years/ Quarterly Breakdown																																								
Analyses of 1000 biofertilizer / biostimulant	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		
	1	Analyses of 100 (tentative) biofertilizer / biostimulant samples for registration and quality control (Incremental) (Agricultural Biotechnology Research Institute, Faisalabad)	Planned	25 (Tentative)	25 (Tentative)	25 (Tentative)	25 (Tentative)	38	2	24	7	0	14.2	The samples received from various quarters for registration / quality control (Directorate SPK, Lahore and from various Agri. Chemists) will be analyzed.			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun																				
		Source of verification: Reports dispatched, Register and notebook	Achieved																																					
Years/ Quarterly Breakdown																																								
Fertilizers registration & Anti-adulteration campaign under Punjab Fertilizer Control Order 1973	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		
	1	7000 Fertilizer sample analysis under anti-adulteration campaign of Punjab Fertilizer (Control) Order 1973 (Incremental) (Soil Fertility Survey and Soil Testing Institute, Lahore)	Planned	1750 (Tentative)	1750 (Tentative)	1750 (Tentative)	1750 (Tentative)	3,685	3,773	3,877	3,611	4,415	3,872				Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun																				
		Source of verification: Daily & fortnightly reports, in time frame	Achieved	Timely;	Timely;	Timely;	Timely;																																	
2	Registration of fertilizer companies as importer/manufacturer/distributor (Soil Fertility Survey and Soil Testing Institute, Lahore)	Planned	As many as companies applied for registration as importer/manufacturer/distributor				926	1,154	1,330	534	1,193	1,027																												
	Source of verification: Licence issued to Applicant	Achieved																																						
Years/ Quarterly Breakdown																																								
	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19					Comments	Decision Items																		

Indicator #	Key Performance Indicator	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19				Comments	Decision Items	
											Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			
Research experiments for fertilizer recommendations on different crops																	
1	500 fertilizer experiments in field for formulation of fertilizer recommendations of different crops (Soil Fertility Survey and Soil Testing Institute, Lahore)	Planned	Sowing of 300 experiments on Kharif Crops	1. Data recording & Harvesting of Kharif Experiments 2. Sowing of 200 experiments of Rabi crops	Maintenacne & Date recording	Harvesting of Rabi experiments	526	438	310	222	204	340					
	Source of verification: Annual Program of Research Work & Field data books	Achieved															
Crop protection (Entomology)																	
Years/ Quarterly Breakdown																	
Key Performance Indicator																	
1	Re-verification of 10 years old insecticides (10 Nos) against cotton pests	Planned	Insecticide application, data recording & Protocol finalized	Insecticide application & data recording/ Compilation	Data analysis & report writing	Report submission	New Exp.	-	-	-	-	0					
	Source of verification: Quarterly reports	Achieved															
2	Monitoring of insecticides resistance against whitefly (5 Insecticides)	Planned	Monitoring continued & Protocol finalized	Monitoring continued	-	-	7	5	5	5	-	4.4					
	Source of verification: Quarterly reports, protocols	Achieved															
3	Standardization of 6 new pesticides against insect pests of field crops	Planned	Standardization for cotton	Standardization for Vegetable	-	Report writing	-	-	27	22	12	12.2	The pesticides submitted by different				
	Source of verification: Quarterly reports	Achieved															
Screening of advance lines against diseases and disease samples analysis																	
Years/ Quarterly Breakdown																	
Key Performance Indicator																	
1	Screening of 200 candidate lines (wheat, cotton, maize, sugarcane, mung, mash, chickpea, sesame, potato, tomato, brinjal, peas & berseem) against various plant diseases (Plant Pathology Research Institute, Faisalabad) (Incremental)	Planned	40	60	40	60	87	89	78	80	65	80					
	Source of verification: Screening reports & data register	Achieved															
2	500 disease sample analysis and identification of diseases and recommendation accordingly (Incremental) (Plant Pathology Research Institute, Faisalabad)	Planned	125	125	125	125	215	210	170	180	185	192					
	Source of verification: Sample reports	Achieved															
Research on Organic Farming																	
Years/ Quarterly Breakdown																	
Key Performance Indicator																	
1	3 Organic farming experiments on mung, mash & turmeric (Agronomic Research Institute, Faisalabad)	Planned	Data recording & harvesting of Mung & Mash	Data recording of turmeric	Harvesting of turmeric	-	First year of organic farming trials										
	Source of verification: Annual Program of Research Work & Quarterly Reports	Achieved															
Recording of Meteorological Data and Circulation to other institutes																	
Years/ Quarterly Breakdown																	
Key Performance Indicator																	
1	Recording of Meteorological Data and Circulation to other institutes (Max & Min Temp, Soil Temp, Relative humidity, Sunshine hours, rainfall etc.) (Agronomic Research Institute, Faisalabad)	Planned	Data recording & circulation	Data recording & circulation	Data recording & circulation	Data recording & circulation	Regular feature										
	Source of verification: Recorded data	Achieved															
Public																	
Years/ Quarterly Breakdown																	
Key Performance Indicator																	
1	13 Farmer field days on soil & water conservation, composting & green manuring technologies (minimum 30 participants in each field day) (Incremental) (SAWCRI, Chakwal)	Planned	2	4	4	3	3	9	8	8	5	6.6					
	Source of verification: Attendance of participants & pictures of events	Achieved															
2	4 Community based trainings of professionals & farmers on drought and flood management in watershed area (minimum 30 participants per training) (Incremental) (SAWCRI, Chakwal)	Planned	1	2	1	-	3	4	11	10	2	6					
	Source of verification: Attendance of participants & pictures of events	Achieved															
3	Advisory services for rehabilitation of newly leveled land to 60 farmers at their sites (Incremental) (SAWCRI, Chakwal)	Planned	15	15	15	15	-	-	-	-	-	0					
	Source of verification: Visit of farmer's field, and pictures	Achieved															
4	12 Trainings on food preservation throughout the Punjab by PHRC (30 participants in each training) (Incremental) (PHRC, Faisalabad)	Planned	3	3	3	3	12	18	18	21	21	17					
	Source of verification: Attendance of participants & pictures of events	Achieved															
5	In-house training programme on food preservation for minimum 50 females (PHRC, Faisalabad)	Planned	1	-	-	-	1	1	1	1	1	1					
	Source of verification: Attendance of participants & pictures of events	Achieved															

Capacity Building of Farmers		Indicator #	Key Performance Indicator	Planned	2017/18					2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	2018/19				
					Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep									Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
Capacity building of farmers		6	18 Plant Protection Trainings to Field staff of Agri. Extension Wing & other stakeholders (minimum 20 participants in each training), ensure maximum AOs across the Punjab (Plant Pathology Res. Institute, Faisalabad)	Planned	3	5	5	5	15	15	15	15	15	15								
		Source of verification: Attendance of participants & pictures of events, training calendar			Achieved																	
		7	40 Trainings for citrus growers regarding orchard management in citrus growing districts of Punjab (100 farmers in each training) (Citrus Research Institute, Sargodha)	Planned	10 trainings & Advisory services for fruit fly and citrus canker management.	10 trainings & Advisory services for citrus psylla management and balance use of nutrients..	10 trainings & Advisory services regarding harvesting techniques and post harvesting issues.	10 trainings & Advisory services for orchard management and balance use of nutrients.		25	23	23	22	15	21.6							
		Source of verification: Attendance sheet of participants, pictures			Achieved																	
		8	Advisory service to minimum 40 farmers for the use of brackish tube well water (Soil Salinity Research Institute, Pindi Bhattian)	Planned	Collection of water samples of 40 tube wells and their analysis	monitoring of ill effects of brackish water on crop production & advisory	Advisory Service	Advisory Service														
		Source of verification: Pictures & water sample reports			Achieved																	
0		9	Preparation of nursery manual for Mango and its publication (Mango Research Institute, Multan)	Planned	Write up and pictures collection	Editing, Review & printing								0								
		Source of verification: Nursery manual published			Achieved																	
		12 farmers days, 2 by each of the 16 crop/fruit/regional institute (minimum 100 participants per day)			Planned	16		16														
1		1	Preparation of Annual Training Calendar by institutes imparting trainings (PPRI, PHRC, SAWCRI, Statistical section)	Planned	Training calendar prepared & circulated																	
		Source of verification: Training calendars & circulation letter			Achieved																	
Analysis of samples of various crops/products by Post Harvest Research Centre, Faisalabad		Years/ Quarterly Breakdown		2017/18										2018/19								
		Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		1	Analysis of 700 samples of crops for dry matter, ash, crude fat, crude protein, crude fiber, phosphorus, potassium, NFE (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	170	170	130	230	546	414	292	265	245	379								
		Source of verification: Data record book, Monthly Report, report/publication			Achieved																	
		2	Analysis of 500 samples of vegetables for dry matter, ash, crude fat, crude protein, crude fiber, beta carotene, vitamin C and NFE (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	120	50	200	130	125	0	57	76	72	65								
Source of verification: Data record book, Monthly Report, report/publication			Achieved																			
3	Analysis of 500 samples of fruits for physical parameters: TSS, sugars, acidity, vitamin C, antioxidant and phenols. (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	250	-	-	250	147	41	150	104	112	111										
Source of verification: Data record book, Monthly Report, report/publication			Achieved																			
4	Analysis of 180 samples of milk (specific gravity, pH, titrateable acidity,) mushroom for dry matter, fat, crude protein, allovera (gel, pH, vitamin C, TSS, crude protein, fat, ash) (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	45	45	45	45	0	0	0	0	0	0										
Source of verification: Data record book, Monthly Report, report/publication			Achieved																			
Pilot Plant Production		Years/ Quarterly Breakdown		2017/18										2018/19								
		Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		1	Production of minimum 12000 Squash pet bottles of 1.5 L capacity (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	6000	-	-	6000	11282	11160	11480	8400	8344	10581								
		Source of verification: Stock register, sale receipt & bank statement			Achieved																	
2	Production of 3200 James Jars (1 pound each) (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	800	800	800	800	2934	4972	5341	3918	3900	4291										
Source of verification: Stock register, sale receipt & bank statement			Achieved																			
3	Production of 5000 packets of Ketchup (1 kg each) (Incremental) (Post Harvest Research Centre, Faisalabad)	Planned	1250	1250	1250	1250	4000	4392	4060	4741	3353	4298										
Source of verification: Stock register, sale receipt & bank statement			Achieved																			
Capacity Building of Scientists																						
Capacity Building of Scientists		Years/ Quarterly Breakdown		2017/18										2018/19								
		Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	2016/17	2015/16	2014/15	2013/14	2012/13	Avg.	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		1	2 Foreign visits/trainings/seminar of Director General Agri. (Research) (Incremental)	Planned	Apply for funding	1	-	1														
Source of verification: Training Documents & report			Achieved																			
2	26 Foreign visits/trainings/seminar, 1 by each Director of AARI (Incremental)	Planned	Identifications of trainings and apply for funding	8	8	10																

Capacity Building of Scientists		Source of verification: Training Documents & report		Achieved																
		Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items				
3	50 Foreign visits/trainings/seminar by Scientists of BS 17, BS-18 & 18+165, 2 from each institute (Incremental)	Planned	identifications of trainings and apply for funding		15	15	20													
Source of verification: Training Documents & report		Achieved																		
4	PPRA training to each (116) DDO (Incremental) Identification of training sources by ADU	Planned		20	32	32	32													
Source of verification: Training Documents & report		Achieved																		
5	Management Trainings to 52 scientists (Incremental)	Planned		10	16	16	10													
Source of verification: Training Documents & report		Achieved																		
6	Trainings related to Monitoring & Evaluation to 30 scientists (Incremental)	Planned		10	10	5	5													
Source of verification: Training Documents & report		Achieved																		
7	Trainings on Chinese Language to 2 scientists (Incremental)	Planned		-	-	-	2													
Source of verification: Training Documents & report		Achieved																		
8	Trainings on ICT/IT Skills to 52 scientists (Incremental)	Planned		10	16	16	10													
Source of verification: Training Documents & report		Achieved																		
9	Trainings on Project Management/Project Preparation/PC-1 to 52 scientists (Incremental)	Planned		10	16	16	10													
Source of verification: Training Documents & report		Achieved																		
10	Trainings on Communication Skills to 52 scientists (Incremental)	Planned		10	16	16	10													
Source of verification: Training Documents & report		Achieved																		
DEVELOPMENT PROJECTS RESULTS																				
Years/ Quarterly Breakdown		2017/18				2018/19				Comments		Decision Items								
Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items								
1	Analysis of 600,000 soil samples (Incremental) [Soil Fertility Survey and Soil Testing Institute, Lahore]	Planned	150000	150000	150000	150000					Soil nutrition status mapping will be helpful for future nutrient management programs and advisory									
Source of verification: Weekly, fortnightly, monthly, quarterly, half year & yearly soil sample analysed reports		Achieved																		
2	Issuance of 500,000 soil health cards [Soil Fertility Survey & Soil Testing Instt., Lahore]	Planned	100000	100000	150000	150000														
Source of verification: Soil health card will be delivered to farmers		Achieved																		
Years/ Quarterly Breakdown		2017/18				2018/19				Comments		Decision Items								
Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items								
1	ISO accreditation-17025 of 21 labs (9 in 2016-17 & 12 in 2017-18)	Planned	Release of funds and ISO accreditation process of 12 labs. Award of ISO certificate to 9 Labs.	ISO accreditation process of 12 labs.	Completion of assessment, trainings	ISO accreditation awarded to 12 labs														
Source of verification: Award of ISO-17025 certificate		Achieved																		
2	International accreditation of 9 labs of AARI	Planned	International accreditation process of 9 labs	International accreditation process of 9 labs	International accreditation process of 9 labs	Completion of process & international accreditation														
Source of verification: Award of international certification		Achieved																		
Years/ Quarterly Breakdown		2017/18				2018/19				Comments		Decision Items								
Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items								
1	Plantation of 250,000 Olive plants in farmer fields (Incremental) [Barani Agricultural Research Institute, Chakwal] As per PC-1	Planned	Farmer selection, layout and water source development	50,000 plants, water source development	Layout and water source development	200,000 plants														
Source of verification: Farmers field pics before and after plantation.		Achieved																		
2	6 trainings of technical staff of Agriculture extension Wing, Punjab on olive growing districts (Incremental) [Barani Agricultural Research Institute, Chakwal] 100 % training of extension workers of olive growing districts	Planned	1	2	1	2														
Source of verification: Attendance sheets & photographs		Achieved																		
Years/ Quarterly Breakdown		2017/18				2018/19				Comments		Decision Items								
Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items								
1	Supply of pre-basic seed (harvested and threshed during June 2017) 600 kg Berseem, 400 kg Alfalfa and 7000 kg Oats to PSC [Fodder Research Institute, Sargodha]	Planned	Seed supplied to PSC								carry forward									
Source of verification: Official letter & stock register		Achieved																		

Improvement in breeding and seed production	2	Supply of Pre-basic seed i.e. 8000 kg Maize, 4800 kg Sorghum and 1500 kg Guar, 1100 kg Berseem, 10500 kg Oats and 560 kg Alfalfa [Fodder Research Institute, Sargodha]	Planned	Sowing of sorghum, maize and guar	1. Harvesting & threshing of Maize, Sorghum & Guar 2. Sowing of Berseem, Oats & Alfalfa	Pre-basic seed of Maize, Sorghum and Guar supplied to PSC	Harvesting and threshing of Berseem, Oats & Alfalfa													
		Source of verification: Official letter & stock register	Achieved																	
	3	Evaluation of collected germplasm for yield, nutrition and diseases	Planned	Sowing of sorghum, maize and guar	1. Harvesting & threshing of Maize, Sorghum & Guar 2. Sowing of	Pre-basic seed of Maize, Sorghum and Guar supplied to PSC	Harvesting and threshing of Berseem, Oats & Alfalfa													
		Source of verification: Data registers & quarterly reports	Achieved																	
Years/ Quarterly Breakdown				2017/18				2018/19				Comments		Decision Items		Comments		Decision Items		
Diversification of High value cropping through promotion of Horticulture	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun					Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Import & Plantation of 5000 date palm plants [Horticultural Research Institute, Faisalabad]	Planned	Release of Fund. Bidding and import.	Delivery and acclimatization.	Acclimatization	Plantation of 5000 plants at farmers field													
		Source of verification: Import documents & plantation record	Achieved																	
	2	Development of 3 date palm multiplication blocks (one each at Horticultural Research Institute, Faisalabad, Horticultural Research Station, Bahawalpur & Date palm Research Station, Jhang)	Planned	Site selection, soil analysis and preparation of layout plan.	Digging of pits and filling	Plantation of Multiplication blocks	Multiplication blocks developed													
		Source of verification: Multiplication blocks established (Plcs)	Achieved																	
3	Production of 4000 seedless kinnow plants each by CRI & private nurseries (Total 8000) [Citrus Research Institute, Sargodha]	Planned	1. Seed sowing for rootstock 2. Grafting of previous year's rootstock	Management of rootstock & grafted plants	Management of rootstock & grafted plants	8000 Plants prepared														
	Source of verification: Nursery stock register	Achieved																		
Years/ Quarterly Breakdown				2017/18				2018/19				Comments		Decision Items		Comments		Decision Items		
Provision of Additional Research Facilities for Development of Heat Resilient Maize Hybrids at Maize & Millets Research Institute	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun					Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Development/screening & testing of 50 inbred lines of maize under optimal & high temperature [Maize & Millets Research Institute, Sahiwal]	Planned	Sowing of 50 inbred lines	harvesting, threshing and seed preparation	Sowing for screening under heat stress condition	Selection of desirable lines													
		Source of verification: Data register, Quarterly reports	Achieved																	
	2	Testing of 60 inbred lines of maize under controlled condition for heat tolerance [Maize & Millets Research Institute, Sahiwal]	Planned	Sowing of 60 inbred lines	harvesting, threshing and seed preparation	Sowing in tunnels for screening against heat stress condition	Selection of desirable lines													
		Source of verification: Data Register, Quarterly reports	Achieved																	
	3	Constitution of 100 heat tolerant maize hybrids & evaluation [Maize & Millets Research Institute, Sahiwal]	Planned	Sowing of parental lines for hybrid constitution	Constitution of 100 hybrids	1. Harvesting, threshing and seed processing 2. Evaluation of developed hybrids under high temp. stress	Data recording & compilation and report writing													
	Source of verification: Data Register, Quarterly reports	Achieved																		
4	Assessment of yield potential of local maize hybrids Vs. Multinational hybrids at 11 farmers' fields [Maize & Millets Research Institute, Sahiwal]	Planned	Seed increase/constitution of selected hybrids	Harvesting, threshing and seed preparation	Sowing of 10 on-farm yield trials	Data recording and compilation														
	Source of verification: Data register, Quarterly reports	Achieved																		
5	5 Agronomic studies to standardize maize hybrid seed production technology [Maize & Millets Research Institute, Sahiwal]	Planned	Sowing of 3 agronomic trials for sowing time, planting ratio and plant spacing	Data recording and compilation	Sowing of 2 agronomic trials for fertilizer requirement and planting ratio	Data recording & compilation and report writing														
	Source of verification: Data register, Quarterly reports	Achieved																		
Years/ Quarterly Breakdown				2017/18				2018/19				Comments		Decision Items		Comments		Decision Items		
Improvement of production technology in Garlic and Ginger	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun					Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Mechanical sowing, Interculture & harvesting of 5 acres of garlic [Vegetable Research Institute, Faisalabad]	Planned	-	Sowing & interculture	Intercultural practices	Harvesting Completed													
		Source of verification: Data Register, Crop Register, Quarterly reports	Achieved																	
2	50 adaptability trials of Ginger in Sialkot, Narowal & Gujranwala [Vegetable Research Institute, Faisalabad]	Planned	Weed Management	Weed Management	1. Harvesting of 50 Ginger trials planted last year 2. Sowing of 50 trials															
	Source of verification: Data Register, Crop Register, Quarterly reports	Achieved																		
Years/ Quarterly Breakdown				2017/18				2018/19				Comments		Decision Items		Comments		Decision Items		
Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun						Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			

Commissioned Research for development of Cotton Seed	1	Germplasm Collection, 20 accessions Screening of 25 accessions Fresh Crosses = 30 30 F1 1000 F2 PSS 50 F3 Progenies [Cotton Research Institute, Multan]	Planned	1. Crossing (30 crosses at each station) 2. F1 at 4 locations and F2 at 2 locations	1. F1 of 30 crosses in greenhouse at 2 locations 2. 50 F3 progenies in greenhouse at 2 locations	Data recording of 30 F1 and 50 F3 progenies at 2 locations	1. Collection of 20 accessions 2. Sowing of 25 accessions for Screening Local Germplasm 3. Sowing of F2 & F4 in field													
		Source of verification: Data registers	Achieved																	
Years/ Quarterly Breakdown				2017/18								2018/19								
Development of Integrated Management of Citrus Orchards to enhance the yield and improvement of fruit quality	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Analysis of 500 disease samples of citrus (Incremental) [Plant Pathology Research Institute, Faisalabad] Source of verification: Monthly Progress Reports; sample collection register and sample analysis register.	Planned	150	150	150	50													
			Achieved																	
	2	Analysis of 500 virus infected disease samples of citrus (Incremental) [Plant Pathology Research Institute, Faisalabad] Source of verification: Monthly Progress Reports; sample collection register and sample analysis register.	Planned	150	150	150	50													
			Achieved																	
	3	Analysis of disease samples from production of 5000 virus free nursery plants of citrus [Plant Pathology Research Institute, Faisalabad] Source of verification: Virus free nursery plants at Citrus Research Institute, Sargodha.	Planned	Sample collection and analysis and rouging Citrus Tristiza Virus plants	Sample collection and analysis and rouging Citrus Tristiza Virus plants	Sample collection and analysis and rouging Citrus Tristiza Virus plants	Sample collection and analysis and rouging Citrus Tristiza Virus plants													
		Achieved																		
4	Production of 2000 less seeded kinnow plants & disease free 5000 nursery plants (Total 7000) [Citrus Research Institute, Sargodha] Source of verification: Nursery stock register	Planned	1. Seed sowing for rootstock 2. Grafting of previous year's rootstock	Mangement of rootstock & grafted plants	Mangement of rootstock & grafted plants	7000 Plants prepared														
		Achieved																		
5	One experiment each on nutrition, irrigation & pruning of citrus [Citrus Research Institute, Sargodha] Source of verification: Sites will be available for inspection	Planned	Start trials	-	-	Results of trials														
		Achieved																		
Introduction and adaptation of high value crops and fruits in climatic conditions of Punjab	Years/ Quarterly Breakdown				2017/18								2018/19							
	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
1	Import & evaluation of 9 fruit plants for adaptability study (Avocado, Citrus, Nectarine, Peaches, Pistachio, Berries, Passion fruit, Mangosteen, Fig etc.) [Barani Agricultural Research Institute, Chakwal] Source of verification: Data Entry Register	Planned	Data recording	Field layout and data recording	Import of 2 varieties of each 9 fruit crops and plantation	Data recording														
		Achieved																		
Evolution of Sorghum and Corn Genotypes for the Production of Conserved Fodders	Years/ Quarterly Breakdown				2017/18								2018/19							
	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Collection, maintenance & evaluation of 20 lines each of sorghum, corn, alfalfa & berseem [Fodder Research Institute, Sargodha] Source of verification: Data register & quarterly reports	Planned	-	Sowing of Alfaalfa and Barseem	Sowing of Sorghum and Corn	-													
			Achieved																	
	2	Characterization of 10 lines each of sorghum, corn, alfalfa & berseem, seed multiplication & experiments on seed rate, diseases, row spacing & last cut Source of verification: Data register & quarterly reports	Planned	-	Sowing of Alfaalfa and Barseem	Sowing of Sorghum and Corn	-													
		Achieved																		
3	Two training Seminars/Farmer days to develop awareness about silage and hay making (Incremental) [Fodder Research Institute, Sargodha] Source of verification: Attendance sheet and minutes of the meeting	Planned	-	-	1	1			200 farmers will get training/awareness about silage and hay making											
		Achieved																		
4	Production of silage (sorghum and corn) and hay (alfalfa and berseem) from one selected line [Fodder Research Institute, Sargodha] Source of verification: Analysis report of silage and hay	Planned		sorghum and corn silage production	Alfalfa and berseem hay production															
		Achieved																		
Provision of lab and field equipment for development of Basmati rice hybrids resistant to bacterial leaf blight, flood and salinity in Punjab	Years/ Quarterly Breakdown				2017/18								2018/19							
	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items			
	1	Screening of elite basmati rice lines (15) against BLB, salinity and submergence stresses & hybridization (10 crosses) [Rice Research Institute, Kala Shah Kaku] Source of verification: (Data book, monthly reports)	Planned	Transplanting, 10 crosses for CMS lines & data recording	Data recording and Harvesting	-	-													
			Achieved																	
2	Seed multiplication of 2 CMS lines of rice [Rice Research Institute, Kala Shah Kaku] Source of verification: (Data book, monthly reports)	Planned	Transplanting	Harvesting	-	-														
		Achieved																		
3	Seed production of 2 test hybrids of rice [Rice Research Institute, Kala Shah Kaku] Source of verification: (Data book, monthly reports)	Planned	Transplanting	Harvesting	-	-														
		Achieved																		
Years/ Quarterly Breakdown				2017/18								2018/19								
										Comments										

Indicator #	Key Performance Indicator	Planned	2017/18				Comments	Decision Items	2018/19				Comments	Decision Items
			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun		
Up gradation of AARI Infrastructure Faisalabad (2017-18 to 2018-19) (Under process)														
1	a) Director General Agriculture (Research) office (Ground, 1st, 2nd & 3rd floor) b) Cotton and Wheat Research Institute block (Ground and 1st floor) c) Horticulture and Vegetable Research Institute block (Ground and 1st floor) d) Oil Seeds and Pulses Research Institute block (Ground and 1st floor) e) Soil Fertility block f) Food Technology Research Institute block (Ground and 1st floor) g) Post Harvest Research Institute block (Ground and 1st floor) h) Rest House of AARI i) Improvement of external tuff tile of AARI j) Carpet roads (office buildings) k) Vehicle parking shed Source of verification: Official letters, documentation pictures of constructing buildings, progress reports	Planned	Tender documentation, Bidding Procedure, Institutional Cooperation	Award of contract, Start of construction work	construction work continued	Completion of work								
Years/ Quarterly Breakdown														
Development of hybrids and varieties in vegetables resilient to climate change (Under process)														
1	Transfer of breeding material from Director Vegetable Research Institute, Faisalabad. Source of verification: Depends upon recruitment.	Planned	Transferred breeding material at the Institute	Transferred breeding material at the Institute	Transferred breeding material at the Institute	Transferred breeding material at the Institute								
2	Planting of breeding material at the institute. Source of verification: Depends upon the planting of seasonal crops.	Planned	After receiving of breeding material from Vegetable	After receiving of breeding material from Vegetable	After receiving of breeding material from Vegetable	After receiving of breeding material from Vegetable								
3	Purchase of Machinery and plant. Source of verification: Successful purchase.	Planned	-	-	-	Machinery purchased								
4	Purchase of vehicles. Source of verification: Successful purchase.	Planned	-	-	-	Vehicles purchased								
5	Execution of breeding work in allotted crops. Source of verification: Crops planted at each location	Planned	-	-	-	Breeding work								
6	Completion of construction of proposed building and structures. Source of verification: Completion of Civil Works.	Planned	-	-	-	Building construction								
Years/ Quarterly Breakdown														
Construction of Separate Washrooms for Female Staff at Research Wing of Agriculture, Field Wing and Agriculture Secretariate														
1	Construction of 81 Washrooms in Research Wing of Agriculture, Field Wing and Agri. Secretariat Source of verification: Official letters and washrooms	Planned	Approval of building Maps, Final Cost estimates and transfer of funds to work department	Transfer of funds to work department, Tender and advertisement for building and approval of tenders and work order	Construction of building	Construction of building and Report writing								
PARB PROJECTS RESULT (SMART AGRICULTURE)														
Crop Diversification through Soybean and Sesame Adaptability Studies under Changing Climate (Under process)														
1	Collection, maintenance and evaluation 50 of Soybean genotypes of soybean [Oilseeds Research Institute, Faisalabad] Source of verification: Data register & Reports	Planned	Sowing of 50 Soybean lines & 5 crosses	Data recording and Harvesting & production of 602 kg prebasic seed	-	-								
2	Collection, maintenance and evaluation of 25 Sesame genotypes [Oilseeds Research Institute, Faisalabad] Source of verification: Data register & Reports	Planned	Sowing of 25 Sesame lines & 10 crosses	Data recording, Harvesting & 100 kg pre basic seed prepared	-	-								
Years/ Quarterly Breakdown														
Promotion of Crop Diversification for Enhancing Farm Productivity in Punjab (Under process)														
1	Experiments on 5 diversified crop rotations in Rice-Wheat system at 2 locations (Faisalabad & Ferozabad) [Agronomic Research Institute, Faisalabad] Source of verification: Data register & Reports	Planned	Site Selection, Sowing of kharif crops (rice, sunflower, maize) & data recording	Harvesting of Kharif crops and sowing of Rabi crops (wheat, lentil, canola)	Data recording	Harvesting of Kharif crops and sowing of mung/mash								
2	Experiments on 5 diversified crop rotations in Cotton-Wheat system at 4 locations (Faisalabad, Karor, Khanewal and Bahawalpur) [Agronomic Research Institute, Faisalabad] Source of verification: Data register & Reports	Planned	Sowing of kharif crops (Cotton, maize, pearl millet) & data recording	Harvesting of Kharif crops and sowing of Rabi crops (wheat, berseem, canola)	Data recording	Harvesting of Kharif crops and sowing of mung								
Years/ Quarterly Breakdown														
1) Indicator # Key Performance Indicator														
			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								

Development and commercialization of tomato hybrids and varieties suitable for sowing in tunnels and (Under process)	2	Synthesis of 25 new experimental hybrids of tomato [Vegetable Research Institute, Faisalabad]	Planned		Nursery sowing and transplanting.	Crop growth and crossing	Data recording/ harvesting and seed extraction.																	
		Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																					
	3	Preliminary evaluation of 40 F1 hybrids of tomato [Vegetable Research Institute, Faisalabad]	Planned		Nursery sowing and transplanting.	Crop growth and fruit setting.	Data recording/ harvesting.																	
		Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																					
	4	Station yield trial of 7 selected indeterminate tomato hybrids from preliminary trial [5 for 1st year + 2 for 2nd year] [Vegetable Research Institute, Faisalabad]	Planned		Nursery sowing and transplanting.	Crop growth and fruit setting.	Data recording/ harvesting.																	
		Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																					
	5	Multi-location/Zonal/NUYT trial of 5 selected indeterminate tomato hybrids from station yield trial (3 for 1st year + 2 for 2nd year) at VRI Faisalabad, VRSS Sheikhpura and BARI Chakwal [Vegetable Research Institute, Faisalabad]	Planned		Nursery sowing and transplanting.	Crop growth and fruit setting.	Data recording/ harvesting.																	
	Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																						
	6	Seed production of promising tomato hybrid(s) [Vegetable Research Institute, Faisalabad]	Planned		Nursery sowing and transplanting.	Crop growth and crossing work.	Data recording/ harvesting and seed extraction.																	
		Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																					
	7	Experiment on early production of tomato by changing the planting techniques [Vegetable Research Institute, Faisalabad]	Planned	Nursery sowing in September.	Transplanting in October.	Crop growth and fruit setting.	Data recording/ harvesting.																	
		Source of verification: data registers, quarterly reports Annual Research Program, Annual Technical Report.	Achieved																					
Strengthening of Data Analytical Facilities at Fodder Research Institute, Sargodha (Under process)	Years/ Quarterly Breakdown		2017/18										2018/19											
	Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items		
	1	Quality characterization of 10 fodder varieties/ lines & 20 milk samples [Fodder Research Institute, Sargodha]	Planned	-	-	Quality analysis of 10 varieties/ lines of fodders	Quality analysis of 20 milk samples																	
		Source of verification: data sheet	Achieved																					
Nutrients management to control citrus decline (Under process)	Years/ Quarterly Breakdown		2017/18										2018/19											
	Indicator #	Key Performance Indicator	Planned	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec								Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items		
	1	Experiment on nutrients management in selected orchards and nutrient management practices to control citrus decline [Soil Fertility Survey and Soil Testing Institute, Lahore]	Planned	1. Selection of sites 2. Soil plant analysis 3. Cultural operations 4. Fertilizer application 5. Fruit yield/quality analysis 6. Disease investigation	1. Cultural operations 2. Fruit yield/quality analysis	Cultural operations	Cultural operations																	
		Source of verification: Quarterly reports and data registers	Achieved																					
and (Under process)	Years/ Quarterly Breakdown		2017/18										2018/19											
	Indicator #	Key Performance Indicator	Planned	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								Comments	Decision Items	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items		
	1	Biofortification of Zn & Fe through genetic & agronomic means and pasta products [Wheat Research Institute, Faisalabad]	Planned	Collection of grain for analysis	Sowing of trials & preparation of pasta products, Zn & Fe analysis	Screening & Hybridization for higher nutrition and biofortification of Zn & Fe	Harvesting, Grain analysis and molecular evaluation																	
		Source of verification: Data register & Quarterly reports	Achieved																					
	2	Screening of germplasm, Biofortification of Zn & Fe through agronomic means in wheat [Barani Agricultural Research Institute, Chakwal]	Planned	Collection of germplasm	Screening of germplasm for nutrient use efficiency & drought	Biofortification of Zn & Fe through soil & foliar application	Harvesting, Selection of lines with higher Zn & Fe contents																	
		Source of verification: Data register & Quarterly reports	Achieved																					
3	Screening of germplasm (50 elite lines & 50 from breeding material) for higher Zn & Fe [Rice Research Institute, Kala Shah Kaku]	Planned	-	-	-	Collection of germplasm & nursery sowing																		
	Source of verification: Data register & Quarterly reports	Achieved																						
4	Selection of 25 sites & sampling (14 soil samples, 2 water samples, 20 leaf & 20 fruit samples) [Mango Research Institute, Multan]	Planned	Site Selection & Fruit sampling	Sampling	Analysis	-																		
	Source of verification: Data register & Quarterly reports	Achieved																						
5	Three experiments on bio-fortification of wheat, chickpea, mung, tomato & canola in 5 agroecological zones [Agronomic Research Institute, Faisalabad]	Planned	Site selection & soil analysis	Sowing of Wheat, chickpea, canola and micro-nutrient application	Sowing of mung, tomato and micro-nutrient application	Harvesting of wheat, chickpea, canola and plant/soil analysis																		
	Source of verification: Data register & Quarterly reports	Achieved																						

Nutrition enhancement of wheat and pasta products under climate change scenarios															
Nutrition enhancement of wheat and pasta products under climate change scenarios	6	Nutritional enhancement of wheat & mung through genetic & agronomic biofortification [Regional Agri. Research Institute, Bahawalpur]	Planned	Collection of germplasm	Screening of wheat and Mungbean	Hybridization, biofortification and data recording	Screening, Harvesting & data analysis								
		Source of verification: Data register & Quarterly reports	Achieved												
	7	Evaluation of 50 inbred lines and approved varieties/hybrids for protein, oil content and pro vitamin A. [Maize & Millets Research Institute, Sahiwal]	Planned	Sowing of 50 inbred lines & characterization	Collection of grain samples for quality analysis	Analysis for quality related parameters & sowing of approved varieties/hybrids	Collection & analysis of grain samples of varieties/hybrids for quality traits								
		Source of verification: Data register & Quarterly reports	Achieved												
	8	Enhancement in nutritional value and quality of ber & date palm [Horticultural Research Institute, Faisalabad]	Planned	Selection of 2 varieties of Date palm	Better management practices in date palm	Selection of 2 varieties of ber and Better management practices in date palm & ber	Evaluation for better quality & dissemination of standardized technology to farmers								
		Source of verification: orchard register/ nursery record and quarterly reports	Achieved												
	9	Screening of 50 lines of Canola germplasm for high Omega-3 fatty acid and 50 sunflower genotypes for high Omega-9 fatty acid [Oilseeds Research Institute, Faisalabad]	Planned	Fatty acid analyses of 50 canola and 50 sunflower lines	Value addition in soybean & sesame	-	-								
	Source of verification: Data register & Quarterly reports	Achieved													
Development of all cotton variety suitable for mechanizing (Under process)	10	Selection of guava farms, Procurement of samples, study of standardization and optimization of pulps/juices and R&D work [Post Harvest Research Centre, Faisalabad]	Planned	Selection of guava farm in Sheikhpura	18 physico chemical tests of guava pulp	Selection of tomato farm in Chiniot & Strawberry in Sheikhpura	Physico chemical testing of tomato and strawberry and standardization of pulps/juices								
		Source of verification: Data register & Quarterly reports	Achieved												
	11	Experiment on testing of available Kinnow variants, rootstocks, orchard management practices and fruit storability [Citrus Research Institute, Sargodha]	Planned	Site selection, basic analysis	Orchard management	orchard trials & Storability	Value addition & results								
	Source of verification: Data register & Quarterly reports	Achieved													
Sustainable management of Dusky Cotton Bug to improve in quality and seed germination from (Under process)	12	Standardization of analytical methods & testing of samples received from different research institutes for Pro Vit-A, Vit-C, Lycopene, TSS, Protein, Acidity & oil contents [Biochemistry Section, AARI, Faisalabad]	Planned	Standardization & analysis of samples	Standardization & analysis of samples	Standardization & analysis of samples	Standardization & analysis of samples								
		Source of verification: Standard analytical methods and analysis reports	Achieved												
Years/ Quarterly Breakdown															
	Indicator #	Key Performance Indicator		2017/18				Comments	Decision Items	2018/19					
	1	Collection of 8 parents of cotton & selection of parents 8 crosses and 8 F1 generation [Cotton Research Institute, Multan]	Planned	Jul-Sep Morphological and CLCUD data	Oct-Dec Picking	Jan-Mar BFI in green house	Apr-Jun Collection and sowing of 8 compact parents			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		Source of verification: Field, greenhouse and data register	Achieved												
Years/ Quarterly Breakdown															
	Indicator #	Key Performance Indicator		2017/18				Comments	Decision Items	2018/19					
	1	Collection of 20 parents of cotton Oil contents analysis [Cotton Research Institute, Multan]	Planned	Jul-Sep Morphological data	Oct-Dec Picking	Jan-Mar Oil Content analysis	Apr-Jun Collection and sowing			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		Source of verification: Field, Greenhouse and data register	Achieved												
Years/ Quarterly Breakdown															
	Indicator #	Key Performance Indicator		2017/18				Comments	Decision Items	2018/19					
	1	Screening of cotton cultivars & testing efficacy of plant extracts against dusky bug [Cotton Research Institute, Multan]	Planned	Jul-Sep Surveillance, Dusky bug collection and data recording on sowing date & screening trials	Oct-Dec Picking	Jan-Mar Data analysis	Apr-Jun Sowing of cotton trials.			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		Source of verification: Field, Lab and data register	Achieved												
Years/ Quarterly Breakdown															
	Indicator #	Key Performance Indicator		2017/18				Comments	Decision Items	2018/19					
	1	Collection, identification & confirmation of identified species of whitefly with molecular data [Entomological Research Institute, Faisalabad]	Planned	Jul-Sep Collection, identification & confirmation of whitefly	Oct-Dec Sampling and PCR analysis	Jan-Mar Data analysis	Apr-Jun Sowing of cotton trials			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		Source of verification: Data register & Quarterly reports	Achieved												
	2	Experiment on efficacy of different insecticides against whitefly in field and lab conditions [Entomological Research Institute, Faisalabad]	Planned	Jul-Sep Sowing of efficacy trial & data recording	Oct-Dec Data recording	Jan-Mar Report writing	Apr-Jun -			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Comments	Decision Items
		Source of verification: Data register & Quarterly reports	Achieved												

Indicator #	Key Performance Indicator	2017/18				Comments	Decision Items	2018/19				Comments	Decision Items	
		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun			
Years/ Quarterly Breakdown														
A Comprehensive Integrated Scientific Approach for the Development of Sustainable Management Strategies of Pink Bollworm (Pectinophora gossypiella) (Under process)	1	Survey, collection, identification and rearing of Pink bollworm [Entomological Research Institute, Faisalabad]	Planned	Collection of PBW from different cotton growing districts	Mass rearing	Determination of alternate host plants of PBW	Sowing of trials and survey of PBW.							
		Source of verification: Data register & Quarterly reports	Achieved											
	2	Experiments on Efficacy of different insecticides in field and lab condition against PBW [Entomological Research Institute, Faisalabad]	Planned	Field trial on efficacy of insecticides	Rearing of PBW	Lab trial on efficacy of insecticides	Report writing							
		Source of verification: Data register & Quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Acceleration of Maize Breeding Through Inducer Line Mediated Double Haploid Inbred Lines for Development of Climate Smart, High Yielding Maize Hybrids. (Under process)	1	Evaluation of inducer line mediated double haploid drought tolerant 70 inbred line. [Maize & Millets Research Institute, Sahiwal]	Planned			Import and sowing of inbred lines	Screening of material for parameters related to drought tolerance							
		Source of verification: Data register & Quarterly reports	Achieved											
	2	Primer synthesis and DNA extraction [Agricultural Biotechnology Research Institute, Faisalabad]	Planned			Primer searching and synthesis at ABRI	Collection of leaf samples, DNA extraction and quantification							
		Source of verification: Data register & Quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Enhancement of quality and yield of guava through improved pre-harvest measures (Under process)	1	Key Performance Indicator Establishment of one block of guava under high density planting geometry (6 Kanals) & Experiments on nutrient & canopy management [Horticultural Research Institute, Faisalabad]	Planned	Establishment of high density guava block										
		Source of verification: Orchard register & Quarterly reports	Achieved											
	2	Selection of 2-3 guava varieties with elite characteristics [Horticultural Research Institute, Faisalabad]	Planned	Survey of orchards at Nankana, Sheikhpura & Faisalabad		Survey of orchards at Nankana, Sheikhpura & Faisalabad								
		Source of verification: Visit report, quarterly reports	Achieved											
	3	Provision of 4000 pedigree plants of already selected strains to the farmers [Horticultural Research Institute, Faisalabad]	Planned	Planting of guava cuttings in tunnel on beds	Shifting of seedlings in poly bags in tunnels	4000 guava plants to farmers								
		Source of verification: Nursery sale stock register, quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Development of short duration, high yielding and disease resistant mungbean cultivars for Rice-Wheat Cropping System	1	Identification of early maturing and disease resistant mungbean genotypes [Pulses Research Institute, Faisalabad]	Planned	Evaluation of 60 entries in SSN-2 & 20 in PYT										
		Source of verification: Data Register, Quarterly reports	Achieved											
	2	Screening against cercospora leaf spot [Pulses Research Institute, Faisalabad]	Planned	Evaluation of 60 entries in SSN-2 & 20 in PYT										
		Source of verification: Data Register, Quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Development of sorghum-Sudangrass hybrids for better forage yield and quality under normal and drought stress (Collaboration with UAF)	1	Evaluation of the 20 best selected hybrids (10 for sorghum and 10 for sudan grass) for drought tolerance in lab & field condition [Fodder Research Institute, Sargodha]	Planned	sowing of trial under lab condition and data recording	Data recording, analysis and interpretation									
		Source of verification: Data Register & quarterly reports	Achieved											
	2	Evaluation 56 Sorghum-sudan grass hybrids (5.5 hybrids) for green fodder yield & physiological data recording [Agronomic Research Institute, Faisalabad]	Planned	Physiological data recording of 300 genotypes	Data analysis of recorded data									
		Source of verification: Data Register & quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Development of drought tolerant double haploid maize hybrids PARB No. 563	1	Maintenance of inbred lines of maize [Maize & Millets Research Institute, Sahiwal]	Planned	Data recording for spring planted crop and sowing of autumn crop	maintaining of inbred lines and data recording	Data recording	Data recording							
		Source of verification: Data Register & quarterly reports	Achieved											
Years/ Quarterly Breakdown														
Ability of growing gaitic cotton in arid areas PARB No. 899	1	Experiment on organic cotton in Pothohar region [Barani Agricultural Research Institute, Chakwal]	Planned	Management operations of crop sown in May	Harvesting									

Feasibility or Priority	Indicator #	Key Performance Indicator	2017/2018				2018/19				Comments	Decision Items		
			Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun				
Import of olive oil extraction machinery for improving working efficiency (ILRC recovery PARB No. 892)	1	Installation of olive extraction machine and training of technical staff [Barani Agricultural Research Institute, Chakwal]	Planned	Jul-Sep Installing and commission of machinery	Oct-Dec Testing and operation of extraction unit	Jan-Mar	Apr-Jun							
		Source of verification: Installation unit & stock register	Achieved											
Impact of managed pollination by Apis mellifera L. on the yield of different crops	1	Evaluation of Apis mellifera contribution in pollination of sunflower crops at Hind Dafen Khan [Entomological Research Institute, Faisalabad]	Planned	Jul-Sep Sowing of sunflower & data recording	Oct-Dec Data recording	Jan-Mar Report writing	Apr-Jun							
		Source of verification: Data Register & quarterly reports	Achieved											
	2	Evaluation of Apis mellifera contribution in pollination of cucurbits [Entomological Research Institute, Faisalabad]	Planned	Jul-Sep Maintaining bee stock & data recording	Oct-Dec Data recording	Jan-Mar	Apr-Jun							
		Source of verification: Data Register & quarterly reports	Achieved											
	3	Evaluation of Apis mellifera contribution in pollination of Brassica crop [Entomological Research Institute, Faisalabad]	Planned	Jul-Sep Sowing of Brassica crop	Oct-Dec Data recording	Jan-Mar Data recording & report writing	Apr-Jun							
		Source of verification: Data Register & quarterly reports	Achieved											
SPECIAL INITIATIVES														
Endorsement of Annual Plan of Research Work from I&D boards and board meetings	1	Endorsement of Annual Plan of Research Work by R&D board of respective Institute [All institutes of AARI]	Planned	Jul-Sep As per Annual planning meeting	Oct-Dec As per Annual planning meeting	Jan-Mar As per Annual planning meeting	Apr-Jun As per Annual planning meeting							
		Source of verification: Weekly report circulated through Email	Achieved											
	2	4 R&D board meetings of each Institute in a year, one in each quarter [All institutes of AARI]	Planned	Jul-Sep 25	Oct-Dec 25	Jan-Mar 25	Apr-Jun 25							
		Source of verification: Weekly report circulated through Email	Achieved											
Auction of all auctionable vehicles, machinery and equipment etc.	1	Auction done and income deposited in Govt. treasury [All institutes of AARI]	Planned	Jul-Sep Availability of relevant research wing staff for timely completion of auction process	Oct-Dec Approval of list of auctionable equipment	Jan-Mar Advertisement and public notice issuance	Apr-Jun Holding of Auction, and depositing income in Govt. treasury.							
		Source of verification: Auction documents & deposit receipt	Achieved											
Weekly Crop Situational Report	1	Compilation of Weekly Crop Situational Report and sending to different stakeholders (Incremental)	Planned	Jul-Sep 13	Oct-Dec 13	Jan-Mar 13	Apr-Jun 13							
		Source of verification: Weekly report circulated through Email	Achieved											
Publications	1	250 research Publications of All directorates	Planned	Jul-Sep 60	Oct-Dec 60	Jan-Mar 65	Apr-Jun 65							
		Source of verification: Acceptance Letter, Publication	Achieved											
Monitoring & Evaluation	1	2 field visits by Director General Agr. (Research) and each Director in a week (Incremental)	Planned	Jul-Sep 600	Oct-Dec 600	Jan-Mar 600	Apr-Jun 600							
		Source of verification: One page field visit reports	Achieved											
	2	Strengthening of M&E Cell with consultation of ADU & 40 Visits of research institutes for monitoring & evaluation (Incremental) [M&E Cell of AARI]	Planned	Jul-Sep Finalization of framework for M&E & 10 visits	Oct-Dec 10 visits	Jan-Mar 10 visits	Apr-Jun 10 visits							
		Source of verification: Monitoring reports submitted to DGAR, framework for M&E	Achieved											
Digitization of Agriculture Research	1	App Development for Research Data recording & farm management by PITB	Planned	Jul-Sep Preparation of product specification documents & sending to PITB by ADU	Oct-Dec App Development by PITB and Demonstration to Researchers	Jan-Mar Data recording through Apps	Apr-Jun Data recording through Apps							
		Source of verification: Data recorded by Apps	Achieved											
5	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun							

Administration of Research Wing	1	Human Resource management, 4 DPC meetings in FY 2017-18, 1 in each quarter	Planned	Recruitment & Promotion of Staff on occurrence of posts, Framing & Approval of Service Rules	Recruitment & Promotion of Staff on occurrence of posts, Framing & Approval of Service Rules	Recruitment & Promotion of Staff on occurrence of posts, Framing & Approval of Service Rules	Recruitment & Promotion of Staff on occurrence of posts, Framing & Approval of Service Rules													
		Source of verification: DPC minutes and notification of recruited staff	Achieved																	
Years/ Quarterly Breakdown				2017/18																
Creation of new post of Additional DG	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	Posting of 3 new Additional DGs	Planned	Approval of service rules & Job Description, Administrative & financial powers. Posting of 3 Additional DGs	-	-	-	-												
		Source of verification: Final Recruitment	Achieved																	
Years/ Quarterly Breakdown				2017/18																
Income Targets of Ayub Agricultural Research Institutes /Parasitoid	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	Generation of Income Total = Rs. 233328125 during 2017-18	Planned	Sale of Agriculture produce and auction of unervisable items	Sale of Agriculture produce and auction of unervisable items	Sale of Agriculture produce and auction of unervisable items	Sale of Agriculture produce and auction of unervisable items													
		Source of verification: Verified Income statements	Achieved																	
Years/ Quarterly Breakdown				2017/18																
Rationalization of AARI resources	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	Rationalization of HR, institutes & land resources	Planned	-	-	-	Rationalization of HR, institutes & land resources completed													
		Source of verification: Proposal Copy, Shifting/transfer orders	Achieved																	
Years/ Quarterly Breakdown				2017/18																
Tree Plantation	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	Plantation of 26000 trees/fruit plants in farm/office/building/residential colonies, 1000 by each institute & 1000 by Estate Care Unit of AARI	Planned	13000	-	13000	-													
		Source of verification: Trees planted, stock register	Achieved																	
	2	Uprooting of old/unproductive fruit plants of Research Farms [HRI, Mango, Citrus, BARI]	Planned	Uprooting of trees	Auction process & disposition of auction amount	-	-													
		Source of verification: Trees uprooted, stock register & auction documents	Achieved																	
Years/ Quarterly Breakdown				2017/18																
International Collaboration	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	No. of partnerships established of strategic crops (wheat, cotton, rice, sugarcane, maize, pulses, oilseeds, fodders, vegetable, citrus, mango, date palm etc.) with relevant international partners (4-5 institutes per year	Planned	Identification of relevent & potential partner	-	-	4-5 Partnerships established													
		Source of verification: International partnership	Achieved																	
Years/ Quarterly Breakdown				2017/18																
Marketing Research	Indicator #	Key Performance Indicator		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun													
	1	Market research on guava, citrus & Mango [HRI, Mango, Citrus, BARI]	Planned	Assessment of Mango market	-	-	-													
		Source of verification: Relevant report	Achieved																	

BUDGET DETAILS- CONSOLIDATED (DIRECTORATE GENERAL LEVEL)														
Type	Historical Data		Quarter 1			Quarter 2			Quarter 3			Quarter 4		
	2016/17 Consumed	Allocation	Consumed	Comments	Allocation	Consumed	Comments	Allocation	Consumed	Comments	Allocation	Consumed	Comments	
Development	34755000	236650000			396559000			202954000			147818000			
Non Development	1792842467	2133011790			168718750			168718750			168718750			
TOTAL	2140597467	2369661790			565277750			371672750			316537750			

BUDGET DETAILS- INSTITUTE WISE BREAKDOWN (NON-Development)								
Serial #	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
	Allocation	Consumed	Allocation	Consumed	Allocation	Consumed	Allocation	Consumed
1	187734250		42992250		42992250		42992250	
	0	0	0	0	0	0	0	0
	187734250		42992250		42992250		42992250	
2	60292250		5534250		5534250		5534250	
	5196000	2471000	1550000		1700000		1700000	
	66221250	8092500	7084250		7234250		7234250	
3	392489000		28489000		28489000		28489000	
	4909000		4909000		4909000		4909000	
	397398000		33398000		33398000		33398000	
4	167495000		3232500		3232500		3232500	
	20971000	137570000	20523000		20523000		20523000	
	177711500	140835000	23756500		23756500		23756500	
5	61590000		2581000		2581000		2581000	
	546000	546000	545000		545000		545000	
	62136000	3127000	3126000		3126000		3126000	
6	72811000		4225000		4225000		4225000	
	0	0	0	0	0	0	0	0
	72811000	4225000	4225000		4225000		4225000	
7	56691500		2818500		2818500		2818500	
	0	0	0	0	0	0	0	0
	56691500	2818500	2818500		2818500		2818500	
8	47498350		1306250		1306250		1306250	
	50000000	0	50000000		0		0	
	97498350	1306250	1306250		1306250		1306250	
9	132749750		13049750		13049750		13049750	
	17278000	17448000	17447000		17447000		17447000	
	150047750	30697750	30696750		30696750		30696750	
10	116073250		7932250		7932250		7932250	
	545000	545000	545000		545000		545000	
	116618250	8139250	8138250		8138250		8138250	
11	63857250		3744250		3744250		3744250	
	53334000	145478000	40324000		40324000		40324000	
	118191250	146922250	44068250		44068250		44068250	
12	94730250		3860500		3860500		3860500	
	2684000	19089000	1250000		1234000		1234000	
	97414250	22949000	5110500		5094500		5094500	
13	127990000		6868000		6868000		6868000	
	68877000	57427000	57427000		57427000		57427000	
	186767000	64295000	64295000		64295000		64295000	
14	71680000		2599000		2599000		2599000	
	2065000	2065000	2065000		2065000		2065000	
	73745000	4664000	4664000		4664000		4664000	
15	67248250		2618250		2618250		2618250	
	0	0	0	0	0	0	0	0
	67248250	2618250	2618250		2618250		2618250	
16	38417000		3140000		3140000		3140000	
	0	0	0	0	0	0	0	0
	38417000	3140000	3140000		3140000		3140000	
17	9058000		35000		35000		35000	
	0	0	0	0	0	0	0	0
	9058000	35000	35000		35000		35000	
18	5470000		97000		97000		97000	
	0	0	0	0	0	0	0	0
	5470000	97000	97000		97000		97000	
19	101482850		10433250		10433250		10433250	
	3818000	3818000	3818000		3818000		3818000	

	14251250	14252250	14251250	14251250	14251250
20					
	44834500	2937500	2937500	2937500	2937500
	0	0	0	0	0
	44834500	2937500	2937500	2937500	2937500
21					
	43647500	4473500	4473500	4473500	4473500
	546000	546000	545000	545000	545000
	44193500	5019500	5018500	5018000	5018000
22					
	41624250	2511250	2511250	2511250	2511250
	0	0	0	0	0
	41624250	2511250	2511250	2511250	2511250
23					
	34546500	881500	881500	881500	881500
	0	0	0	0	0
	34546500	881500	881500	881500	881500
24					
	14695000	1669000	1669000	1669000	1669000
	0	0	0	0	0
	14695000	1669000	1669000	1669000	1669000
25					
	67360500	4114500	4114500	4114500	4114500
	1724000	394000	384000	384000	384000
	69084500	4508500	4298500	4298500	4298500
26					
	30462500	1839500	1839500	1839500	1839500
	90000	192000	50000	0	0
	31362500	2031500	2339500	2339500	2339500
27					
	38643000	209000	209000	209000	209000
	3095000	2131000	1122000	397000	397000
	41738000	4221000	3212000	2487000	2487000
28					
	33752400	3054000	3054000	3054000	3054000
	0	0	0	0	0
	33752400	3054000	3054000	3054000	3054000
Total Non-Development	2133911750	148718750	148718750	148718750	1487189000
Total Development	23664000	36639000	30254000	14763000	88379000
Grand Total	236661750	185357750	178972750	163451750	2375968000

Abbreviations
ESC Expert Sub Committee
PSC Punjab Seed Council